I-64 Incident Command Monthly Report March 2008

AM and PM Peak Periods

Rush Period

- Morning = 6:30-8:30 a.m.
- Evening = 4-6 p.m.

Incidents/Weather

Overall, in March, there were 1233 incidents impacting traffic or in the lane, an increase over February and January 2008. These incidents included stalls, crashes, abandoned vehicles, and vehicle fires. In addition to the vehicle related incidents, the following significant incidents impacted traffic patterns.

- 1. **On March 4 and 5** A winter storm impacted the a.m. and p.m. rush hours on the 4 and continued through the 5.
- 2. **On March 20** the flooding in Eureka and Valley Park caused lane closures of Route 141 at I-44, impacting p.m. rush hour travel in the region south of I-64. A crash on I-270 south of I-44 during p.m. rush hour contributed to the delays around the Valley Park lane restrictions.
- 3. **On March 21** flooding in Eureka and Valley Park. The region was significantly impacted while crews placed barriers and sandbags along I-44 west of Route 141. Other area routes closed in the region caused impacts to travel for both a.m. and p.m. rush periods.
- 4. **On March 25** on eastbound I-64, the Spirit of St. Louis bridge was struck by a boom truck, damaging the bridge and causing delays in this area towards the end of a.m. rush hours.

With traffic volumes relatively stabilized, the main contributing factor that impacts the freeways is incidents. Specifically, I-270 has seen an increase in traffic volumes and any incident can severely and has impacted travel times for that rush period.

<u>Interstates</u>

MoDOT is monitoring the northbound and southbound I-270 ramps to westbound I-64. Drivers seem to be having difficulties navigating the additional lanes. The message on the message board was changed March 6 to assist motorists. Observations are showing a marginal improvement in driver weaving behaviors. Further study of the vehicle counts has been initiated.

MoDOT is also working on Variable Speed Limit (VSL) project along I-270 and I-255 to mitigate traffic congestion issues. The first of the VSL signs has been installed and turned on to traffic. This is expected to be fully functional by early May.

The following segments are a representation of the traffic volume changes and travel times during the a.m. and p.m. rush periods. Attached are detailed charts for each interstate.

Travel times compared to January and February 2008 are relatively the same. All increases in the average upper limit are attributed to incidents.

Summary of Morning Rush Period:										
Segment	% Volume Change			Peak Hr Vol			Travel Times			
	Jan	Feb	Mar	Before	Jan Feb	March	Before	January	February	March
I-270 westbound at Chain of Rocks	30%	15%	30%	4099	52314694	5376	10min	9-11 min	10-13min	9-13 <mark>min</mark>
I-270 northbound from I-55 to I-44	10%	5%	5%	4620	49904989	<mark>4966</mark>	6min	6-10 min	6-10min	<mark>6-16</mark> min
I-270 northbound from I-44 to I-64	25%	20%	20%	4778	59535800	<mark>5840</mark>	7min	7-9min	7-10 min	<mark>7-10</mark> min
I-255 eastbound at Jefferson Barracks	80%	70%	75%	1088	19761856	1885	4min	4min	4min	<mark>4</mark> min
I-70 eastbound from I-270 to I-170	15%	10%	-5%	3236	37593610	<mark>3049</mark>	4min	4min	4-5min	<mark>4</mark> min
I-70 eastbound from I-170 to downtown	-5%	-15%	-10%	4421	41133780	3677	11min	11-16min	11-23min	<mark>11-15</mark> min
I-44 eastbound from I-270 to downtown	-20%	-20%	-25%	3590	29022948	<mark>2727</mark>	16min	14min	14-15 <mark>min</mark>	<mark>14-16</mark> min

Summary of Evening Rush Period:										
Segment	% Vol	ume C Feb		Peak I Before		March	Before		el Times February	March
I-270 eastbound at Chain of Rocks	40%	30%	40%	4398						<mark>12-29</mark> min
I-270 southbound from I-64 to I-44	5%	5%	-5%	5366	56295053	<mark>5230</mark>	9min	7-19 min	7-23 min	7-26 min
I-255 eastbound at Jefferson Barracks	-45%	-45%	-40%	2693	15481459	<mark>1557</mark>	4min	4min	4min	<mark>4</mark> min
I-70 westbound from I-270 to I-170	60%	60%	60%	2875	50435005	<mark>5093</mark>	4min	4mir	4-6min	<mark>4-6</mark> min
I-70 westbound from I-170 to downtown	-20%	-20%	-10%	5357	44094198	4128	12min	11-18 min	11-21 min	<mark>11-15</mark> min
I-44 westbound from I-270 to downtown	20%	15%	10%	3992	46744616	<mark>4455</mark>	16min	14-16 min	14-16min	<mark>14-25</mark> min

I-70 Reversible Lanes

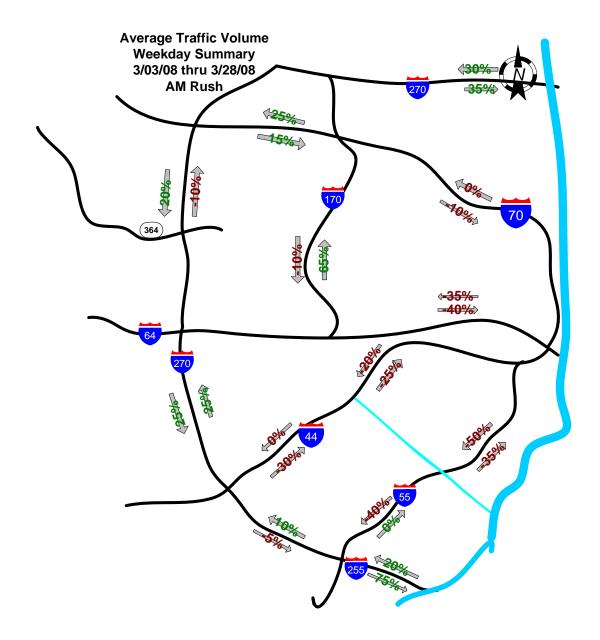
The reversible lanes on I-70 have traditionally operated in the eastbound direction during the a.m. hours, and in the westbound direction during the p.m. hours. Their operation was switched on January 8 to mitigate significant travel delays in the westbound direction during the a.m. peak, and in the eastbound direction during the p.m. peak. On holidays and snow events, the reversible lanes are set in the eastbound direction.

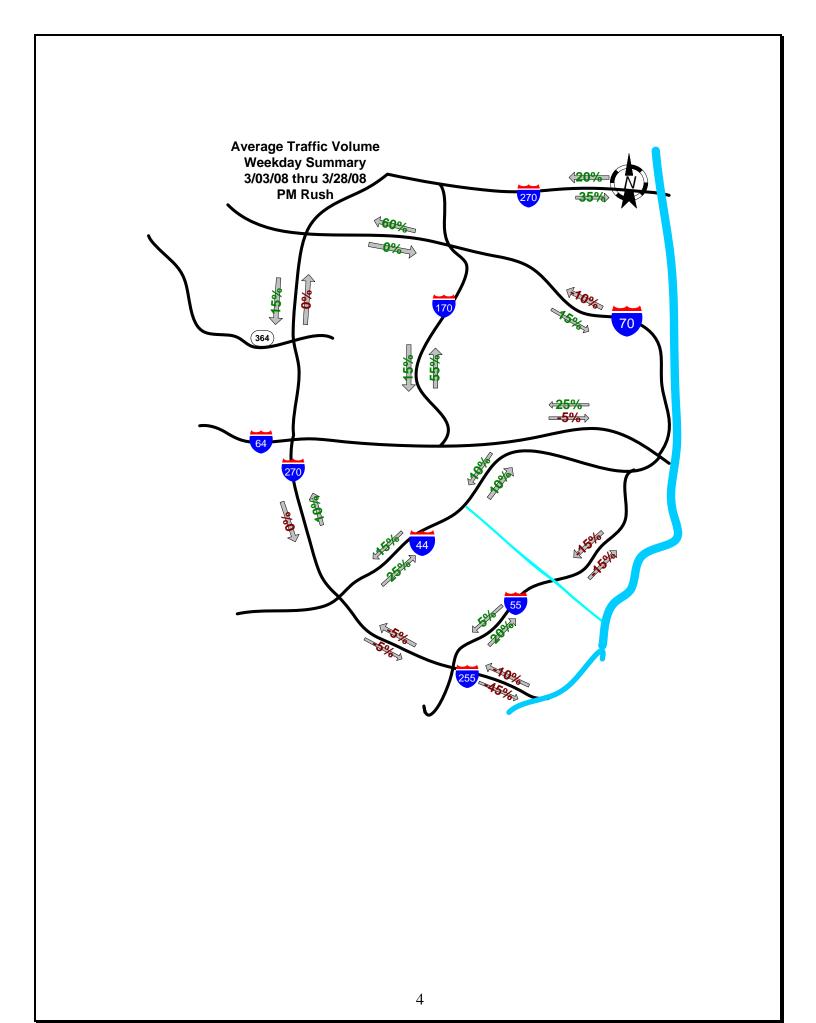
The volumes and travel times for March continue to support the decision of the direction of the reversible lanes. Volumes decreased in March in both directions compared to the previous two months. These volumes are the amounts over a four-hour rush period.

- Westbound a.m. volume was 1400 vehicles higher than eastbound a.m. volume, an average of 350 vehicles per each hour during the peak rush period.
- Eastbound p.m. volume was 1900 vehicles higher than westbound p.m. volume, an average of 475 vehicles per each hour during the peak rush period.

Regional Average Traffic Volume Comparisons

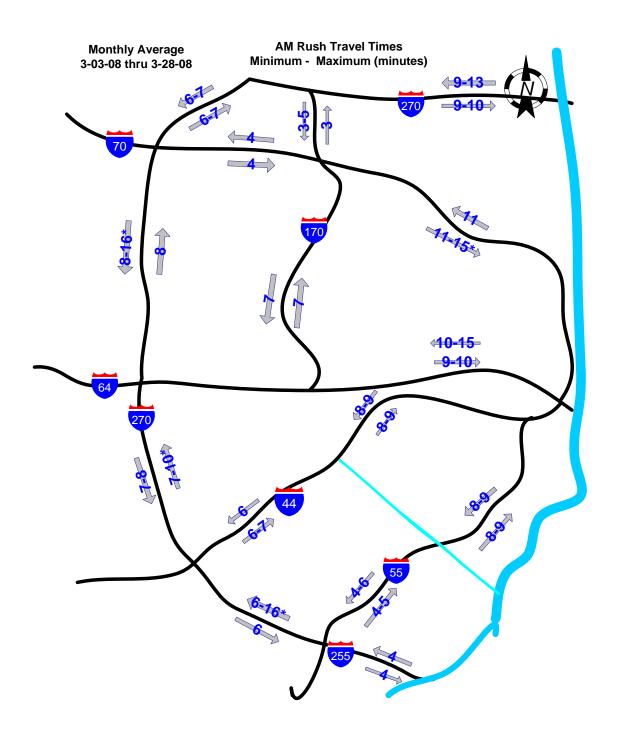
Following are map views of the Average Monthly Traffic Volumes (a.m. and p.m. rush periods) compared to average baseline volumes from October 2007. The percentage change was derived using data from MoDOT sensors and Traffic.com sensors.

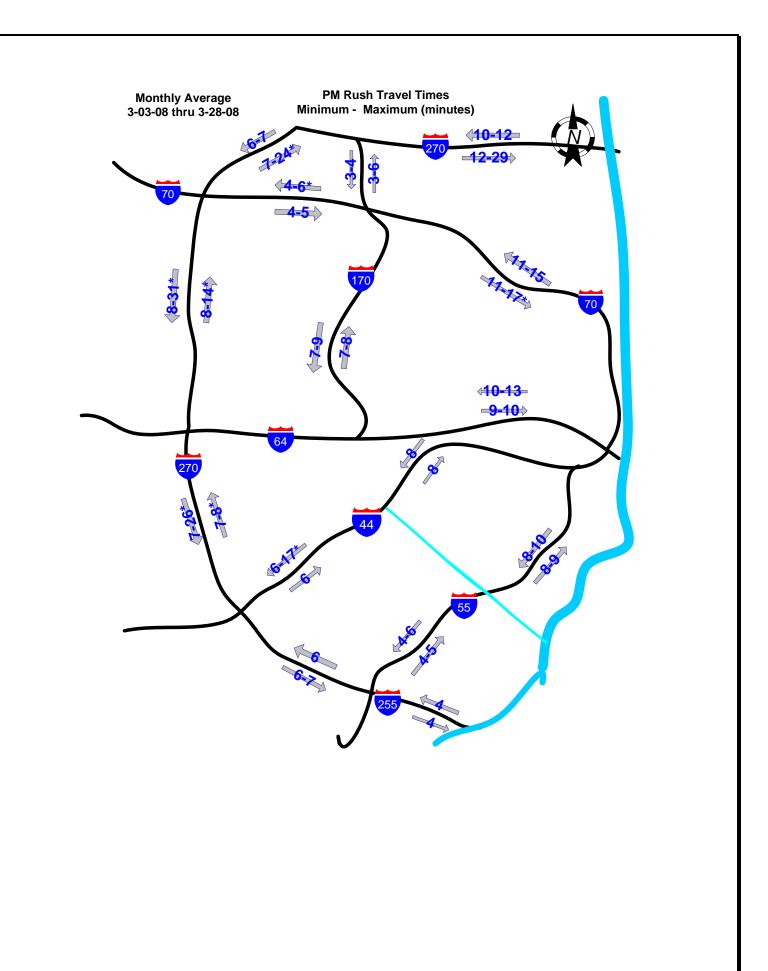




Regional Travel Times

Following are maps that depict the Average Travel Time experienced throughout the month of March. There is a map for the a.m. rush period and the p.m. rush period.





Arterials

The following segments are a representation of the traffic volume changes and travel times during the AM and PM rush periods. On the arterials, the peak travel times are from 7:30 – 8:30 during the AM peak and 4:30 to 5:30 during the PM peak.

Volumes

Summary of Morning Rush Period Volumes:								
Segment	Volume percent	Peak Hr Vol						
	change	Before	March					
Route 141 North of I-44	-3%	7400	7200					
Page at Schuetz	10%	7300	8000					
Olive at Ballas	60%	3100	5000					
Manchester at Lindbergh	30%	3300	4300					
Southbound Lindbergh at Manchester	300%	900	2600					
Northbound Lindbergh at Manchester	-35%	2400	1600					

Summary of Evening Rush Period Volumes:								
Segment		Volume percent	Peak Hr Vol					
		change	Before	March				
Route 141 North of I-44		-15%	8900	7700				
Page at Schuetz		15%	8900	10200				
Olive at Ballas		15%	6500	7500				
Manchester at Lindbergh		15%	2600	3000				
Southbound Lindbergh at Manchester		-50%	4300	2300				
Northbound Lindbergh at Manchester		-65%	2300	800				

Travel Times

Summary of Morning Rush Period Travel Times								
Segment	Travel T 7:30	imes at	Travel Times at 6:30 AM	Time Saved by Shifting 1 hour				
	Before	March	March					
Route 141 – 44 to 40/64	14 min	12 min	12 min	0 min				
Page – 270 to 170	13 min	13 min	10 min	3 min				
Olive – 141 to 170	22 min	21 min	13 min	8 min				
Manchester – 141 to Hanley	25 min	22 min	17 min	5 min				
SB Lindbergh – 70 to 44	25 min	23 min	20 min	3 min				
NB Lindbergh – 44 to 70	29 min	29 min	25 min	4 min				

Summary of Evening Rush Period	ravel Time	s			
Segment	Travel T 4:30	imes at PM	Travel Times at 3:30 PM	Time Saved by Shifting 1 hour	
	Before	March	March		
Route 141 – 40/64 to44	19 min	16 min	13 min	3 min	
Page – 170 to 270	13 min	10 min	9 min	1 min	
Olive – 170 to 141	20 min	19 min	17 min	2 min	
Manchester – Hanley to 141	39 min	28 min	24 min	4 min	
SB Lindbergh – 44 to 70	33 min	25 min	27 min	-2 min	
NB Lindbergh – 70 to 44	29 min	25 min	25 min	0min	

St. Louis County Highways and Traffic

The following compares the pre I-64 closure traffic volumes with the March traffic volumes on Clayton and Ladue Roads. Despite the increase in traffic volumes on these roads, the travel times have not increased.

Morning Rush Observations:

- Morning rush hour peak is from 8 to 9 a.m.
- Clayton Road at Lay Road eastbound increased by 34% from 1,100 to 1,470 vehicles during the peak hour and westbound increased by 133% from 510 to 1,190 vehicles during the peak hour.
- Ladue Road at Warson Road eastbound increased by 100% from 380 to 760 vehicles during the peak hour and westbound increased 67% from 450 to 750 vehicles during the peak hour.

Evening Rush Observations:

- Evening rush hour peak is from 5 to 6 p.m.
- Clayton Road at Lay Road eastbound increased by 60% from 810 to 1,300 vehicles during the peak hour and westbound increased 66% from 930 to 1,540 vehicles during the peak hour.
- Ladue Road at Warson Road eastbound increased by 46% from 570 to 830 vehicles during the peak hour and westbound increased by 110% from 410 to 860 vehicles during the peak hour.